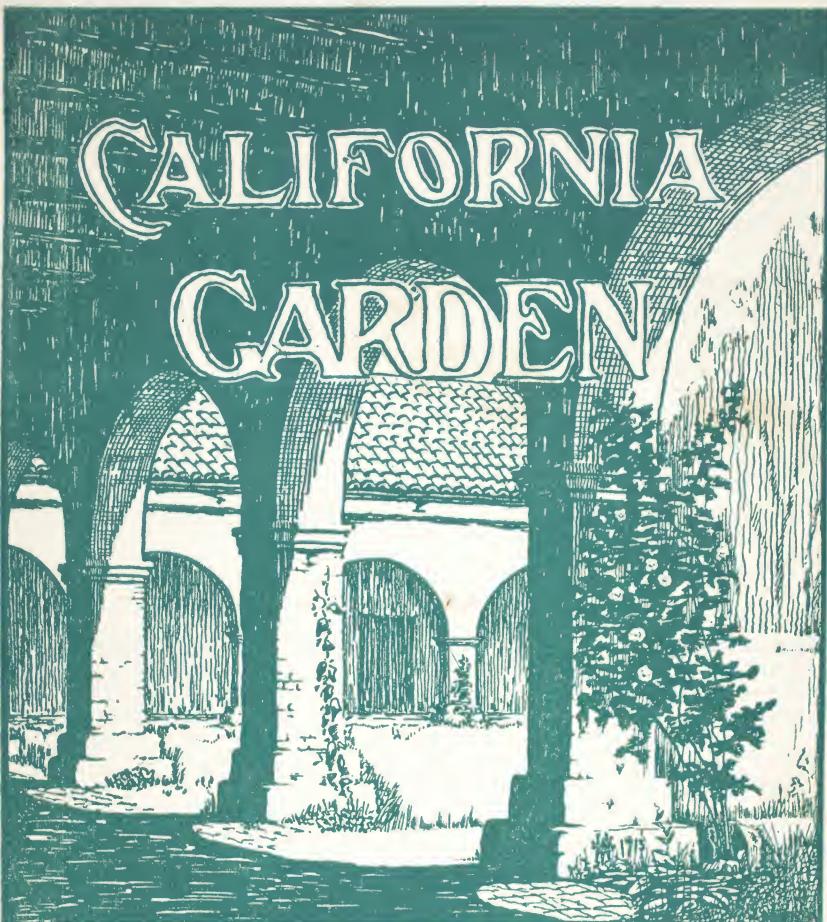


CALIFORNIA GARDEN



Christmas Number

OUR GARDEN OF SUCCULENTS
SOME ROSE HINTS
DISEASE AND INSECT
PESTS OF ROSES

DECEMBER 1926

TEN CENTS

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The California Garden

Published Monthly by the San Diego Floral Association
One Dollar per Year, Ten Cents per Copy

Vol. 18

SAN DIEGO, CALIFORNIA, DECEMBER, 1926

No. 6

OUR GARDEN OF SUCCULENTS

By Charles Francis Saunders.

It must, I think, have been in a neglected bit of garden at Berkeley, where we spent some hours a few years ago, that we picked up the seeds of the complaint. The fever, however, did not become manifest until the succeeding summer, since when it has progressed amazingly and resulted in some serious inroads upon the limited square-footage of our garden-spot, to say nothing of some demoralization to our bank account. Our family doctor, who is of a waggish turn, calls the disease *cacoethes succulentorum*, and assures us there is no real cure; it is just one of those troubles that must be allowed to run their course and purge themselves. He says some alleviation may be expected to result if the patient is permitted to talk of his case and without contradiction, which is my excuse for the present confession.

To speak plainly, then, we have become mildly demented over that remarkable class of plants known in a general way as Succulents. Just why these phlegmatic, unemotional, often fantastic and dumpy creations so fascinate us, I leave to the psychologists to explain. The fact remains that they do, and we have even gone so far lately as to sacrifice a bed of rather choice columbines in our greed for space whereon to found another colony of sedums and such. Take, for instance, a quaint little rosette flat to the ground with clustered, gray-green leaves frostily edged and pink-tipped. We have patiently watched and waited for it to bloom, a warrantable expectation of any plant, you would think; but in respect of flowers it has year after year disappointed us. Instead of that it has charmed us by putting out from its base short runners, radiating like spokes from a hub, each runner developing a leaf rosette like the parent, with the same reticence as to flowering and the same guinea-pig prolificness in the matter of offspring. So now, instead of one plant of this sort, we have a whole bedful possessed of a pronounced mania for creeping out into the path. A learned friend tells us it is probably a *sempervivum*; at any rate it is safe to call it by the vernacular name Hen-and-chickens, which comfortably covers a multitude of species.

Then there is the Euphorbia family. Cer-

tian members of this polymorphus tribe seem to enjoy trapping the non-botanical into thinking they are cactuses, when they are nothing of the kind. One that flourishes with us is *Euphorbia Cereiformis*. It is a capital copy of some sort of cereus, as the name implies, until it breaks out in an eruption of little red pin-like bodies which, on inspection, prove to be petal-less flowers on long stalks; and of course no cereus blossoms like that. Still more curious is a cherished specimen, upright, wrinkled and cylindrical, which looks like corn on the cob. This was recently acquired from a dealer who called it *Euphorbia mamillaris*, and perhaps he was right. He also tempted us, but vainly, (for our purse at the time was very flat) with a specimen of the strange Medusa's-head euphorbia; looking indeed like that mythological lady's caput, with slender branches sprouting out of the crown and dangling snakily down on all sides, the tips turning upward as a snakes would in such circumstances. Some day, I suppose, we must go back and buy that gruesome plant. And with it, I foresee, that we shall bring home another freak of the vegetable kingdom that this tempter of a specialist in succulents has for sale, and that is *Anhalonium Williamsii*, the Dry Whiskey or Mescal-button of Texas and northern Mexico. While there is nothing particularly captivating in the appearance of this famous, or rather infamous, member of the Cactus family, it has a history that is excuse enough to give it a place in any collection of plant oddities. Some of the Chihuahuan Indians, they say, gave it divine honors and expect you to take off your hat in its presence.

Going in for succulents has made us acquainted with a class of Compositae of which we were ignorant before—certain dropsical looking plants the nurserymen call *Kleinia*, but which conservative botanists, I believe, regard as a section of the great genus *Senecio*. Our introduction to it dates from a casual visit to an old Pasadena garden where there was a run-down bed of cacti and other drought resiliants. Here we noticed a plant with fat, elongated, jointed stems suggesting sausage links, bare save for an occasional small, fleshy, somewhat divided leaf; some

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specimens without even that. What could they be? At last one was found bearing a drooping cluster of modest flowers of composite make-up, which betrayed the family secret and we traced it to *Kleinia articulata*, the Candle-plant of South Africa. *Kleinia radicans*, another of our acquisitions is not only odd, it is curiously beautiful, like a mass of little vegetable footballs, their delicate sea-green flushing to rose at the tips. Our adventures with succulents have furthermore led us into a wider knowledge of the aristocratic family of the Lily, which it is rather surprising to learn includes such un-lily-like oddities as the aloes, haworthias and gasterias. One of the very special pleasures that we get from our succulent garden is the thrill that comes when one of our pets turns out to be something quite different from what we guessed it was. An instance of this sort occurred last summer, when a charming little thing with small bluish-gray prisms of leaves, which we had been coddling along under the impression that it was some sort of stone-crop, bloomed out one day into the unmistakable flowers of a mesembryanthemum. And what a red letter day that was when a trim little specimen which in the absence of flowers, had every other symptom of being a sedum, was pronounced by a scholar in such matters to be of quite another family, in fact *Portulacaria afra*, noted as being a favorite morsel for elephants in its far-away African home, where, they say, it covers large areas.

So while our succulents lack the conventional beauty of roses and lilies, they have a lure of their own—at least, for us; for I must own that not everybody finds in them the fascination that has caught us. Like avocados and the desert, they seem to be to many an acquired taste, if a taste at all. If, however, you have fallen under their spell, and are of a meditative sort, there is a rare solace in poking about a varied collection of them, pulling a weed here and there or straightening a straying shoot, or, better yet, just sittin' oriental-wise on your heels in silent contemplation of their grotesqueries and placid outlook upon this foolish noisy, hurrying world. Very admirable, too, is their philosophic standing of neglect; if they do not get watered today, they pull themselves a little closer together and await in serenity the morrow and how vital they are, reproducing their kind in many cases from the veriest morsel of stem or leaf!

For folks with a minimum of time and space to devote to gardening, a bed of succulents holds great possibilities of pleasure as well as comfort of spirit.

NURSERYMEN BANQUET PROF. BAILEY
By Miss A. M. Rainford.

It was my great pleasure not only to hear Professor Bailey in San Diego but also to attend the banquet given him by the nurserymen's club of Los Angeles and hear him speak there. The banquet was given in the Chamber of Commerce Building and was attended by approximately two hundred and fifty people, among them many representatives of other garden clubs and organizations. I was fortunate in being placed at the table with Professor Edwards, who is in charge of horticultural work in the Los Angeles schools; Miss Reed, also connected with the school department nature work; Mr. and Mrs. Walter Burn, the latter as Belle Angier the author of "Gardening in California", and her sister, Miss Iva Angier, an attorney. We were joined by two delightful ladies from Pasadena, whose names I failed to write down, but they were ardent amateur gardeners.

Prof. Bailey, questioned if present horticultural tendencies were an expression of the soul or an expression of commerce, depreciated the limited variety of subjects grown and the apparent desire only to increase size and color. In his opinion the quantity production and standardization develops skill and experts but no horticulturists and tends to discourage the amateur spirit. However, he feels that the amateur of the day is not a trifler but is as the name expresses, a lover, and will not perish. Professor Bailey feels that the proper use of leisure is a most important problem and that its correct utiliza-

(Continued on page 4)

SOME ROSE HINTS

By Forrest L. Hieatt,

Local Secretary America Rose Society.

Rose success is, after all, a matter of wise selection, careful planting, proper pruning, adequate feeding and sensible, loving care.

We are fortunate in San Diego in that we can grow Teas and other tender sorts that are denied those who live in the cold northern section of our country. That does not mean that we should not use care in selecting varieties for our gardens, some varieties do best in our cool moist spring and autumn months while others seem to prefer the drier warmer weather. Marechal Niel, a prime favorite in the Southern States, is a failure in most of our gardens here.

While there are some sorts that are not suited to our conditions one must indeed have large grounds to accomodate those that are. It is a good plan to look about and see what roses do well in your own neighborhood, this should provide a safe guide for a beginning and it would, no doubt, emphasize the value of some of the old standbys that some in the pursuit of the new novelties are prone to overlook.

I think we should all grow those California bred roses that have brought lasting fame to their originator, Mr. Fred Howard of Los Angeles, for Los Angeles, Wm. F. Dreer, Mrs. S. K. Rindge, Mrs. Wm. C. Egan and Miss Lolita Armour have all proved their worth here and some of them to the far ends of the rose growing world. However, Armour does better not too close to the Coast. I have another of Mr. Howard's creations that gives every promise of taking its place right along with the rest—Mrs. Lovell Swisher is a strong vigorous grower with clean bronzy foliage and freely produces long pointed buds of coppery salmon opening to fragrant flowers of delicate salmon pink passing to flesh pink at the edges. I am planning on planting some of the newer Howard roses this winter and will be glad to report on them next year. Outside of saying that every one should have Padre, Angele Pernet and that older but neglected Louise Catherine Breslau I shall not go further into the question of varieties; I shall, however, be glad to supply a list of such as I can recommend for the editor to use if space permits.

I agree with Mr. J. Horace McFarland, Editor of the American Rose Annual and with many others that we have been planting our roses too deep. We have been told to plant the bush so that the bud or union with the understock is two to four inches below the surface of the bed, presumably to prevent suckering. This is the rankest fallacy. If the root stock has been carelessly prepared it will sucker in spite of deep planting. I know of but one firm on the coast that does this thing right and whose roses do not sucker. It is needless to say that I do not

patronize any of the others.

Roses prefer a heavy soil containing a good percentage of clay or dobe, these soils contain more plant food suitable for roses, potash, etc., and they also do not dry out so quickly. In lighter soils more attention must be given to watering and more potash supplied. The situation for your rose bed should be one where strong drafts are avoided, where they have the benefit of the sun for a part of the day and not too near trees and large shrubs as the roots of these will rob your roses of both food and moisture.

Prepare your bed to a depth of 12 to 18 inches according to the sub-soil, providing drainage where necessary as a waterlogged soil will suffocate your plants.

In planting do not let roots be exposed to sun or air, keep them under wet burlap or in water until ready to go into the ground. Remove all injured or broken roots and if you will shorten in the heavier roots you will induce a more fibrous root system able to take up a greater quantity of food and convert it into foliage and flower.

Be sure that the roots are spread out in the hole and that the soil is well firmed and then soaked to prevent air pockets and that the bud or union (if budded stock) will be at about the surface of the bed when settled. Buy plants that are budded low in which case the root system is not buried too deep. If you will examine a seedling rose or one grown on its own roots you will notice that the roots begin very close to the surface and they rarely if ever go down more than twelve inches but will usually be found at half that distance.

Feeding. I prefer feeding from above rather than putting a lot of food deep in the trench where the roots will never reach it. The rose plant requires Potash for structure or wood, Nitrogen for foliage and phosphate for the flowers. This can be supplied in animal or commercial fertilizers. Potash in hard wood ashes seems to be more readily available than commercial potash. Blood and bone meal will supply both phosphate and nitrogen. In any case care should be taken to see that the ration is well balanced and if these fertilizers are applied as a top dressing and lightly raked into the soil a liquid food will be carried down to the roots at each watering.

Some Rosarians claim that there is a very definite relation between the use of animal manures and the spores of mildew and other fungous diseases and therefore advocate the use of commercial fertilizers exclusively. I am not prepared to subscribe to this theory as yet but will make a test this year to determine the merits of this contention. It is good practice, however, to work into the soil a good trowelful of blood and bone meal to each plant when cultivating the beds just after pruning whether you use animal ma-

nures or not. In the use of animal manure be sure it is well rotted else there is danger of burning the roots.

PRUNING should be done in the last week of January or the first week of February for best results; at this season the cold weather has ripened the wood and the new growth hasn't started to any extent.

Cut out all old wood and all weak and twiggy growth. Select three to five of the most vigorous canes of last year's wood and cut these back to from six to twelve inches from the ground, the weaker the growth the severer the pruning. Prune to a good, strong eye preferably an outside one that will give shape and symmetry to the bush, making the cut one-half inch above the eye with knife or shears that are good and sharp and bruising the bark as little as possible.

Keep up a moderate pruning throughout the season by cutting the blooms with long stems to within two eyes of main stem, do this whether you use the cut flowers or let them mature on the bush. This method will keep the bush in good condition and will moreover keep a good quality of bloom coming all through the season.

I would like to give a warning against that fool notion that seems to have got abroad of withholding water in July and August and then pruning in September. In the first place it is against Nature and in the second place you will weaken your bushes and if you don't destroy them altogether you will limit their usefulness. Summer time is the natural time for roses to grow and winter time is the natural resting period for roses. Mind you they become dormant not from lack of moisture but from cold weather when there is plenty of moisture in the ground. Rose roots should never be allowed to become dry. Follow nature, it is the safest guide.

Buy good stock, the best is none too good and the cheapest in the long run. Budded stock will give more bloom and will last longer. Plant them well and feed them, not too much, and give them loving care and you will be rewarded a hundredfold in the returns they will give you for your interest.

NURSERYMEN BANQUET, PROF. BAILEY (Continued from page 2)

tion makes a people great. As he expressed it, the resourceful life makes the best of each opportunity and as sowing and growing is the great miracle and mystery beyond comprehension, we should reverence it and thereby increased our spiritual income.

Professor Bailey must have enjoyed the wonderful orchid blossoms on his table. There must have been at least fifty of the lovely flowers which were brought by the firm of Armacost and Royston and after the formal speech-making was concluded all present were invited to inspect them.

THE SMALL FORMAL GARDEN

By Grace Robinson.

This in simple design could with advantage more often be used in the lay-out of the average small house. Much space is given up to the inevitable lawn and usually so little to flowers which give more pleasure and are really less expense and trouble. These are banished to the back yard and are usually a jumbled mixture.

Plan a small garden as simple as may be, say of a central square or oblong bed, a path around and four narrower beds surrounding it. Get good proportions, the paths not too wide and not too narrow. Edge the beds with ordinary bricks laid length ways, set in a little cement. Do not build the beds up in any way. The soil should be no higher than the paths and the bricks standing about two inches above the ground level. The soil should be very thoroughly made up, no very large expense in so small an area. The paths are charming bricked, or why not cobble stones, small, with a few paving stones down the center of the path to walk on, as cobble stones are not the most comfortable things in the world to one's feet. If the expense of a laid path is to be avoided then gravel or grass can be used. To add to the idea of formality a neat little edging surrounding the beds directly inside the bricks, kept clipped down to a few inches, such as cuphea, box, or santolina would be good, with a clipped box or small arborvitae at either side of the path entrance. And here then you have a lay-out that whether empty or a blaze of color can but offset the house.

In regard to the planting, the center bed may have plants standing a little higher than those in the surrounding beds. If roses are to be used at all, or in every bed, treating it a rose garden, tree roses would give height in the center and a pair set on either side of the main entrance would be an added attraction. People here seem just awakening to the fact of how attractive these standard roses can be.

Here are a few plantings that come to mind for the beds. For Spring (1) pansies and Spanish Iris with a center bed of yellow and flame snapdragons. (2) Viola cornuta papillio and lavender sweet alyssum. Center bed, coral pink phlox drumondii and Heuchera sanguinea (3) Frilled pink eschscholtzia. Center bed, Collinsia bi-color and mixed Darwin tulips. (4) Baby blue eyes or lobelia with yellow daffodils. Center bed ranunculus and Iris. (5) A summer planting of the deep velvety purple petunia with delphinium Blue Butterfly. Center bed salpiglossis or semi-double flesh pink larkspur. (6) For quite permanent beds, Erica carnea and convolvulus mauritanicus, central bed pale pink penstemons.

The Dec. and Jan. Gardens

DECEMBER GARDEN

By Mary Matthews

Don't wait longer to buy and put in those bulbs that you will want to see blooming in your garden next spring. From now on they will begin to lose vitality if kept out of the ground. Now with the winter rains coming on is a good time to get your Tulips in about five inches deep and four or five inches apart.

Trees, shrubs and the various vines can be planted this month, make out your list and send it in early, if you do this you will probably get better service than if you wait till the last minute, and be sure and select stock suited to your locality and soil. We are so prone to seek something new, something out of the common that we often neglect the old and well tried subjects.

Still there is a fascination about experimenting with new things and of course our garden would lack variety and interest if we all grew just the same old things. With the small stuff it is better to grow a quantity of one thing than just one or two here and there of various subjects.

You can still continue to divide your beardless Iris this month, though some prefer to do it in February. They are all water loving so if you put them in the Herbaceous border see that they have ample moisture especially about blooming time. *Orientalis gigantea*. *Monerii monspur*, and hybrids of these are all good, easily grown and increase rapidly.

From now on through into late summer you can make a planting of Gladiolus every two weeks, so as to have them continually in bloom. Just now I have Halley, an early scarlet, and a pink I do not know, in bloom, from bulbs left in the ground. This I think comes from the unusually warm weather we had all fall.

Speciosum Lilies can go in as soon as you can procure them. Often they are late coming to the florist as they are shipped in. These, the so-called Japan lily, do well here, although the newer Regal lily and likewise Henryii also called yellow *Speciosum*.

If he does not carry them ask your florist to order for you some *Tigridia*, "Mexican Shell flower," they are easily grown and make a beauty spot in the garden during the summer.

Your Ranunculus and Anemones should be well up if they were planted early. Watch

(Continued on Page 7)

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THE LAWN AND GARDEN

By Walter Birch.

A the risk of repetition I find myself drifting back in thought to the lawn, and "thereby hangs a tale"! Last spring, after having put it off for a year or two, I decided that I must have a new lawn, the old one being about twelve years old, and composed largely of devil grass and weeds, with a sprinkling here and there of the original planting of Kentucky Blue Grass and White Clover.

So I hired a man with a strong back and weak head, and set him to work to spade up the old lawn. He carefully turned the sod over, making a pretty good job of it, and I then let it lie for about a month, and got the same man to go over it with a potato hook or four pronged hoe, telling him to get rid of all the old devil grass roots and other rubbish.

Well, he took away many barrow loads, leaving a fairly good seed bed. But still the ground was not very clean, and then against my better judgment, instead of spading the ground again, and giving it another month for devil grass and other foreign grasses and weeds to sprout, and then hoeing and cleaning them out, I was in too great a hurry to have a nice lawn again, so I raked over the surface, applied some commercial fertilizer and pulverized sheep manure, and sowed some number one Kentucky Blue Grass and White Clover.

As the weather was getting fairly warm, I usually sprinkled night and morning, because, I was sure going to have some lawn! Well, sure enough, in four or five days the white clover made quite a showing, but as blue grass is of slow germination it did not make much headway before all the remains of the old lawn, acting under the stimulation of cultivation, fertilization and irrigation, began to grow apace.

By that time my outlook on things in general, and the lawn in particular, began to harden, more particularly when one or two of my neighbors who were laying down new lawns thought it a great joke on "the seedsman" to have a lawn like that!

Well, I soon "allowed" my wife to help with the sprinkling and I pitched in and did some weeding. Then I hired a boy to weed and finally a man, and now, after about twice the required amount of work we have a pretty good lawn.

(Continued on Page 13)

The California Garden

Editor
R. R. McLean
Associate Editors
Miss Mary Matthews
Alfred D. Robinson

PUBLISHED MONTHLY BY

The San Diego Floral Association

P. O. Box 323 San Diego, Cal.

Main Office, San Diego, California

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Entered as second-class matter December 8, 1910, at the Post office at Point Loma, California, under the Act of March 3, 1879.

California Garden is on the list of publications authorized by the San Diego Retail Merchants Association.

ADVERTISING RATES

One Page	\$15.00	Half Page,	\$7.50
Quarter Page	3.75	Eighth Page	2.00

Advertising Copy should be in by the 1st of each Month

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THE MUSIC OF THE ROSE

(Editor's Note: In response to a request for a contribution for the December California Garden, Mr. Peter D. Barnhart of Los Angeles sends an article by C. G. Adams on "The Music of the Rose". Mr. Barnhart writes as follows:

"You will have all sorts of contributions on the subject, from varieties and how to grow them, and prune them, and the war against their enemies, but I venture to say that none will savor of the sentimental as does that which I have copied. We sacrifice too much of the spiritual for the material things of life. Let us get to an occasional feast of the soul and rise for a little while to that which will endure after the heaven's are rolled up as a scroll and the elements have perished from fervent heat.'")

Away back in Bible times we are told that a celebrated king, when ill, summoned to his presence the "Sweet Singer of Israel" to drive away the evil malady with his song and harp, and we are informed that he was successful. The sweet sounds which were thus produced had a soothing and curative influence, and cast a quieting spell over the king.

Also we are told by scientists that every thing has its key. Radio demonstrates that ears are tuned to hear or perceive only certain sounds; if too loud or too soft, or too slow or too fast, we do not "listen in". We cannot get it unless our hearing facilities are properly tunned for its reception. A respon-

sible authority tells us of a totally blind person who possessed a sense that those having eyesight do not enjoy—the ability to see, through the sense of hearing; in other words a certain sound gave the idea of red to the listener, who could thus distinguish color, he assumed, by sound.

If this be true, why should there not be those, gifted with an extra sense, who might distinguish as sound waves the radiations or vibrations of certain colors? We speak of a quiet color or a loud color; we know the disquieting effect upon some nervous systems that clashing, inharmonious colors produce. Have you ever endeavored to sleep in a bedroom, the walls of which were decorated wth large ,loud figures? Compare such a room with one in which all the surroundings were quiet, subdued; you realize the restful effect. The radiating influence of one disturbs, the other brings rest and peace.

How few of us can tell just how the sound waves of a great chorus, symphony orchestra, or band are conveyed from the human voice and the instruments and so recorded on a flat disc that a graphophone will reproduce the sounds in all their hamonious beauty. Or explain our latest wonder, radio, with its waves traveling through the air at the speed of light, and causing all who "tune in" to hear the voice or the instrument that set those waves in motion.

Have roses a tone key? What have they that we are definitely capable of observing with our senses? We know they have color which we distinguish with the eye; we know they have fragrance, which we appreciate with our sense of smell. While our ears are not yet sensitive to the song of the rose, may it not be there, nevertheless?

What effect has the beautiful bouquet of Ophelia in the hands of the bride? Can you not almost hear them sing, "Tis thy wedding morning; arise, sweet maid, arise?" See how to us, the silent harmonies of the roses enhance the whole occasion! The brides bouquet of roses performs its part of the wedding music. When the little babe is born in the household, watch the effect of a cluster of beautiful roses upon the mother; see the joy expressed on her countenance; hear the exclamation of pleasure produced by the "music of the rose."

When sorrow like a deluge sweeps over the soul of a friend, the first impulse is to send a bunch of roses. Why?

Is it because their comforting music has a consoling effect that nothing else can give? They sooth grief and drive away sorrow as plainly as did of old, David's song and harp.

Have I suggested to the reader that the roses have other qualities than those we perceive by one or even all of our combined senses? It is not only the fragrance, the color, and the form we perceive; there is an indefinable something we can not yet see or

hear. None the less, we feel its inspiration ferment the soul when we are so "tuned in" by joy or sorrow as to get outside the material things.

Yes, I dare say that the music of the rose is definite, it is sublime; and every day it fulfills its mission to humanity as the Creator intended from the beginning. This rose music rejoices with those who rejoice; it weeps with those who weep. The rose, I believe, reaches us through its form, its color, its fragrance, preparing us thus, when we are fully "tuned in" to the wave length of God's loveliest flower creation, to hear the sweetest song of all, the music of the ROSE.

CHARLES G. ADAMS.

THE VOICE OF THE GARDEN

It would be interesting to know if any of your readers have ever heard the voice of the garden. This may seem rather a surprising question to ask; nevertheless there does exist such a thing, and I should say it is only those to whom a garden is a place, not just of plants, but rather of personal friends who have heard it. I do not for a moment suggest that there is any sound which one could term as being distinctly audible, but there is a certain very low murmur which, perhaps, is received more by subconscious hearing than conscious listening. Take, as an instance, a perfectly still night in high summer, just before the gloaming, when the garden is full of perfume and not a leaf stirs. Stand perfectly still, then the voice speaks. But take anybody with you who is not of a similar temperament to yourself. Neither he nor yourself will hear anything beyond the usual night sounds of Nature.

The conclusion nearly everybody jumps to concerning this is that it is due either to the imagination of a highly strung temperament or the undetectable action of the atmosphere. That may or may not be correct: who knows? But perhaps there may be some garden lover who thinks ther is something in this theory.

—J. Black, Beal, Northumberland.

GARDEN REMINDERS

(Continued from Page 5)

them carefully as the birds are fond of the tender foliage. Keep them moist but give good drainage and keep the soil loose. This holds true with all bulbous subjects. If they are not in your garden it is not too late to put in Tritonias, Ixias and the so-called Scarlet Freesia Anomatheca. At the end of each season if there is an end to seasons, I say to myself "fewer bulbs next year, try something else." But when planting time comes round my interest is greater than ever and I find myself busy planning to grow more bulbs—nothing to me gives more pleasure for the time and money you put into them.

PLACING OF TREES AND SHRUBS

By K. O. Sessions

San Diego's favorable climate makes it possible for vines, shrubs and trees to grow twice as fast as they do in the central part of California, the San Francisco Bay region, and about five times as fast as in the colder climates of the Middle West and Atlantic Coast. Believing this fact, would it not be a wise precaution to estimate or know the size of your plant in two to five or twenty years before you decide where to place it? It may be a tree only 1 foot high—such as the Araucaria Excelsa or Norfolk Island Pine, in twenty years it will be 40 feet or more tall and have a spread of 20 to 25 feet.

The Pittosporum undulatum—one of our excellent shrubs—becomes in five years a small tree—surely it should not be placed within six inches or one foot or even three feet of the house or the front steps. Likewise, most of the thrifty and desirable shrubs, when used next to the house should be set out from two to four feet from the building.

The Italian Cypress soon is 10 to 15 feet tall. If the house is a cottage unless thought and care is given to the location the top of Italian Cypress will soon be beneath the eaves. A tree has long life—it is a joy to see it in its full development—then why not place it thoughtfully and carefully, so that when it is 10 to 20 years old it will be a fine asset to the property and not a crooked and undesirable tree—too large for its position and must be cut down. One should place thoughtfully the large growing plants—then fill in the space with the small growing plants that will be taken out in time. Such fillers are: Streptosolens, Lantanas, Heliotropes, Rock Roses, Genistas, Dahlias for the summer—Marguerites and choice Pelargoniums, etc.

Another class of plants that are deserving of more attention and use are the very slow and low growers. The Indian Hawthorns or Raphiolepis is at the head of such a list — Creeping or prostrate growing Junipers, Diosma Alba or Breath of Heaven, Coprosmas so planted and trained that they grow flat and not tall, many sorts of dwarf and slow growing evergreens.

Some vines make an excellent ground cover when allowed to spread over the ground (especially on a slope) instead of training them to a trellis. We need to use more plants here as ground covers and therefore have less lawn. It is a serious mistake to trim every shrub so the grass can grow up to its trunk—much better to let the foliage come to the ground and cover quite an area and keep the grass outside of it.

So many of our Citizens have had homes and gardens in the colder sections of the

(Continued on Page 8)

NOTES ON GINGERS

By Harry Johnson

Mr. Barnhart's interesting notes on the varieties of *Hedychium* recall other facts and fancies concerning them. Some years ago while living in the highlands of Guatemala I found *H. coronarium*, the Butterfly Lily or Garland Flower, completely naturalized on the banks of the Rio Coban. It formed thickets covered with hundreds of spikes of the powerfully fragrant, snowy blossoms. The rich, black, humus laden soil and perpetual moisture of the region seemed to suit its requirements perfectly. Coban has a rainfall of about 100 inches and a most marvellous flora.

Besides the three species mentioned by Mr. Barnhart there is one other found in local gardens—*H. Coccineum*, a red flowered species well known in Honolulu. *H. Gardnerianum* I have found will stand a surprising amount of drought and for many years there has been a row of them at the old Sturtevant place in Hollywood that seldom received an irrigation, yet bloomed well yearly.

The flower structure is most interesting and distinctive of the family. In *H. coronarium*, for instance, the showy labellum is really not a petal nor are the smaller "petals" of this origin. They represent sterile stamens or staminodes that have taken over the function of the corolla and serve to attract insect visitors. The labellum is composed of a pair of these staminodes fused and expanded and through the tube of which the single fertile stamen protrudes. Fritz Muller records the flowers as being pollinated by the wings of butterflies. Botanists have recorded some 30 species many of them being grown in various parts of the world for their beautiful flowers. MacMillan in his Handbook of Tropical Gardening mentions *H. angustifolium* as being grown in India for its bright red flowers. The genus is of peculiar interest to us because of its easy culture and permanence and really worthwhile beauty. They stand shipment very well and will repay the efforts of collectors. *H. coronarium* succeeds admirably in the border or as an aquatic in the water garden. It revels in the wet soil at the margins of pools or in boxes directly in the water.

They belong to the Ginger family (Zingerberaceae), which is intimately related to the Banana family (Musaceae), the Canna family (Cannaceae), and the Marantaceae, to which belongs the arrowroot of commerce. These four orders are so closely knit that Bentham and Hooker united them into one group in their system. Almost all of the Ginger family are native to the Indo-Malayan region.

Another interesting member of the Ginger family is *Alpinia nutans* long grown in Cal-

ifornia, but seldom met with. The common name is shell flower in reference to the peculiar blossoms. Like all members of the order it has practically no aerial stem, but the enrolled leaf sheathes serve instead. The plant forms large, closely packed clumps, the gracefully arched stalks reaching as high as 15 or more feet. The flower racemes are terminal, the axis being shortened until the inflorescence is almost spikelike. The individual florets have the distinctive labellum in this case lined and marked like the mouth of a shell. The colors are yellow and brown and pink and always attract attention.

All of the group that we grow are easily propagated by division of the rhizomes, almost every piece pushing buds under the influence of moisture and heat.

GOOD ROSES FOR SAN DIEGO GARDENS

REDS—Gen. MacArthur, Heosier Beauty, Hadley, Gloire de Chedane Guinnoisseau, Ulrich Brunner, Edward Mawley, Arthur Cook, Lord Charelmont, Red Radiance.

YELLOWS—Golden Emblem, Mrs. Rindge, Souv. de Claudius Pernet, Iona Herdman (best as a standard), Duchess of Wellington, Lady Hillingdon, Rev. F. Page Roberts, Véronshuren and Wm. F. Dreer.

PINKS—Los Angeles, Radiance, Caroline Testout, Georges Pernet, Rose Marie, Mrs. Wm. C. Egan, Elsie Beckwith, Mrs. C. W. Edwards, Diadem, Admiration.

SHADED—Queen Alexander, Padre, Louise Catherine Breslau Angele Pernet, June Boyd, President Cherioux, Sunstar, Mad. Edouard Herriot, Cheerful, Irene Thompson.

SINGLES—Isobel, Innocence, Mrs. Oakley Fisher, Vesuvius, Irish Fireflame, Irish Elegance.

PLACING OF TREES

(Continued from Page 7)

United States, where the trees and shrubs were practically all deciduous—and they are accustomed to their bareness in the winter and to have the grass grow up to the stem of the plant.

Also the gardener who makes the lawn and the sprinkler system man wants to have everything in lawn—naturally the bigger the better—but in this favored climate it is a mistake—less lawn—and more color in the garden and a fine tree or two even on a small lot adds to the interest and the setting of the home and to the attractiveness of the city.

Throughout the greater part of the U. S. one can have a lawn in the summer time and only bare trees in the winter—but here we can have gay flowering trees, vines and shrubs in the winter, but a poor lawn. So let us have less lawn and more beauty by carefully placing plants so they have room for full development and a long life.

SAN DIEGO PARKS

By J. G. Morley

The controversy in regard to the placing of the State College in Balboa Park has at last been settled by the decisive result of the election held on November 23rd, by a majority of two and one-half to one against further encroachments. The people of the city are to be congratulated for their loyalty, which we hope has settled forever the existing area of Balboa Park.

The topography of Balboa Park with its diversity of elevation and contour lends itself to many types of improvement on the hills, in the canyons and on the mesas, with a wide divergence in the character of the planting and recreational facilities. The former exposition grounds containing the California and Fine Arts buildings now devoted to a Scientific Library and Archeological Museum; the Natural History Museum containing many of the finest collections on the Pacific Coast; the Botanical Building and Conservatory with their large and varied collection of exotic plants; the Bridges Art Gallery, where many rare paintings and works of art are on exhibition, and the extensive Zoological Gardens containing the largest and best collection of animals, birds and reptiles in the West, are several of the main features provided for the enjoyment of our citizens.

Progress in the continued development of Balboa Park as well as the other parks of the city as funds are available is the constant aim of the Board of Park Commissioners. About eighteen months ago, the Board engaged the services of Mr. John Nolen to make a new plan of Balboa Park on a comprehensive scale, not only in the landscape treatment, but also in the laying out of extensive recreational fields to provide baseball diamonds, tennis courts, bowling greens, croquet courts, large swimming pool, children's playground and picnic grounds, and a large and modern municipal club house building, equipped with the best of indoor recreational facilities, with a large auditorium where interesting programs may be given for the enjoyment of our citizens. There will be a series of bridle paths for those who enjoy horseback riding; the golf links, and other features that will tend to make of Balboa Park a wonderful place for out-of-door enjoyment. The final plans will be completed in the early part of 1927.

DECEMBER WEATHER IN SAN DIEGO, CALIFORNIA

By Dean Blake.

December marks the beginning of the rainy season throughout this section. Precipitation, as a rule, is more frequent than dur-

ing the preceding months, and is often attended by moderately high winds. Five or six days with rain may be expected, but sometimes as many as 12 or 14 come to pass. Unless the season is exceptionally deficient, rainfall is heavy enough to supplant irrigation.

Being the mid-winter month with the shortest days of the year, it is marked by cooler weather. Many mornings have a "snap" to them, and frost danger to vegetables, tender shrubs and delicate plants becomes acute, especially in the lower levels. In contrast to the cool nights that prevail, the days are generally warm with much bright, cloudless weather, and temperatures over 70 degrees are recorded more frequently than those below 40 degrees.

Over a period of 54 years, the rainfall has averaged 1.82 inches, the greatest amount being 9.26 inches in 1921 and the least 0.00 in 1900. The highest temperature ever recorded was 84 degrees on the 28th in 1919; the lowest, 32 degrees on Christmas in 1879. In 1924, a five minute velocity of 42 miles per hour was registered, the greatest during the month since the establishment of the station. The average humidity is lower than any other month in the year.

TRIMMING VINES

During this month every Boston ivy, Virginia creeper, wistaria, honeysuckle and all deciduous vines should have a real severe pruning.

They will begin to make their new growth by Jan. 15 or Feb. 1, and be the better next summer, and such trimming should be done each year at this time. The evergreen vines and especially the winter bloomers, which we prize more highly, should be pruned in March and April, just before the spring growth begins. They grow in summer and bloom on the new wood in the fall and winter.

The planting time for such varieties is in the spring and not in the winter.

The evergreen clinging vine, *ficus repens*, is seldom pruned sufficiently for it looks more delicate when thin. It is too often planted too close; one vine for one side of the house is sufficient. This vine needs pruning while it is growing, and all ends that do not cling to the surface must be cut off and the growth directed continually to be most decorative.

The tall and high growing vine *Bignonia Tweediana* which clings to a surface needs very generous pruning each year at this time. It begins its new growth in March, and by April and May is full of yellow blooms. This vine is conspicuous on the tower of the Methodist and the Presbyterian churches.

K. O. SESSIONS.

DISEASE AND INSECT PESTS OF ROSES

By R. R. McLean.

Generally speaking, disease and insect pests of roses that are more or less common in Southern California may be divided into those affecting flowers, leaves, canes and roots.

Diseases

The most important of the leaf diseases are mildew, rust and leaf spot. Mildew also injures buds and expanding petals of rose blooms. These diseases very seldom cause the death of the plants affected but they do very seriously interfere with the development of roots and aerial parts, including the flowers. The foliage and blossoms of badly affected plants are often disfigured to such an extent as to become practically worthless. Mildew, rust and leaf spots are fungous growths parasitic upon their hosts. They do not have green coloring matter (chlorophyl) as do the higher plants and are not able to manufacture their own food supplies, hence must obtain it from other plants.

Mildew, or "meal-dew," produces a characteristic greyish-white powdery or felty appearance on leaves and new growths. It usually is more active in cool, moist, spring weather than at other times. After the disease has progressed for a few days in badly affected plants, the leaves will become distorted, discolored and curl up. Buds and new growths swell to an abnormal size and also have a distorted appearance. There is a great difference in the susceptibility of varieties to this disease. Some roses, such as Dorothy Perkins, for instance, cannot be grown successfully along the coast because of mildew. Others, such as Cecile Brunner are entirely immune to it. Where there is a choice of varieties, those not subject to mildew should be planted.

Control measures for this disease, as well as for rust and leaf spot, should be begun at pruning time in the winter. Carefully collect and burn all prunings and fallen leaves. Then spray the dormant bushes with strong lime-sulphur solution (1 to 9 or 10) before spring growth begins. Watch for the appearance of mildew on the new growth in the spring and at the first sign of it dust thoroughly with dry sulphur, the very finest flowers of sulphur that can be obtained, or spray with commercial lime-sulphur solution diluted 1 to 35. In case the weather is quite cool when mildew appears the lime-sulphur spray will be more immediately effective than sulphur, as the latter will not fume until the sun temperature is 70 to 75 degrees. There are also said to be some commercial sulphur preparations of value in the control of mildew. Sulphur, however, is the effective agent in them all. Bordeaux mixture is occasionally used to kill mildew but has the disadvantage of

staining the leaves. Liver of sulphur (potassium sulphide) may be used in place of dry sulphur or liquid lime-sulphur where the spotting caused by the latter is objectionable, but is probably not quite so effective. It is used at the rate of 1 ounce to 2 gallons of water. If care is observed not to irrigate roses on cloudy days in the spring, or in the evening, it will help to prevent mildew. The surface of the ground should be dry by nightfall, as a moist atmosphere around the plants at night is favorable to the development of mildew. Finally, if you wish to keep mildew from attacking susceptible plants, spray or dust frequently.

Rust, also a fungus, may usually be found in the summer in one stage or form and in another in the fall. The summer stage takes the form of yellow or orange spots on the undersides of leaves, having a prickly appearance under a glass. The fall stage appears as brown warty or prickly spots or growths. Heavily infested leaves are not only badly injured and prevented from performing their proper functions but often drop entirely. Rust; however, not as generally destructive as mildew. It appears later in the year and not during the heaviest blooming season. Measures used to control mildew will also control rust. In addition to spraying or dusting, remove and burn any infected leaves as you may discover them.

Leaf spot or blotch is rarely as injurious as either mildew or rust. It is a fungus that by reason of its attacks and growth causes large purple or dark brown patches on the upper surfaces of leaves. It also weakens the plant by preventing the foliage from performing its functions. No special control measures are usually necessary, particularly if sulphur has been faithfully used for mildew and rust. Pick off and burn any badly diseased leaves.

Crown gall is the most serious disease of the crown and roots. It is of bacterial origin and is comparable, in its effects, to cancer in the human body. It can be identified by the large irregular corky growths it causes around the crown of the plant usually just at or under the surface of the ground, or on the roots. Its presence on the roots or crown prevents the proper transfer of cupe sap from the roots to the leaves and of the elaborated food from the leaves to the roots. Sooner or later it will kill the plants attacked unless surgical methods are undertaken. At best even surgery is only a temporary measure.

No rose bushes showing evidences of crown gall should be planted. If, however, the disease develops later on around the

crown, carefully chisel or cut away the foreign growths as they appear, sterilizing in formaldehyde the tool used after each cut. Never cut into clean wood with an unsterilized knife after using it to remove crown gall. After the galls have been removed paint the exposed surfaces with some such disinfectant as Bordeaux paste. Inasmuch as crown gall is not always visible above the ground, it is good practice to occasionally remove the soil from around the crown of rose bushes and give them a careful inspection for this disease.

Insect and Other Animal Pests

The insects attacking leaves, new shoots and flower buds of roses are, in this section, principally the familiar aphids or plant lice, rose beetles and cucumber beetles. Red spiders, although not insects, are often found on the undersides of the leaves. Snails and slugs also feed on foliage and blossoms. The leaf-cutter bee is something responsible for considerable damage to foliage.

The standard control for plant lice is tobacco and soap. A teaspoonful of black leaf 40, a concentrated tobacco extract, to a gallon of soapy water, well mixed and sprayed frequently on leaves and buds, paying particular attention to the undersides of leaves, will serve to keep these pests down. Commercial nico-dusts are also effective. The important thing in aphis control is to watch for their first appearance and begin control measures the instant they are discovered, as they multiply with tremendous rapidity. These insects suck the juices from the leaves, buds and new shoots, causing them to become unsightly as well as injuring them directly.

Rose beetles, dark colored, hard shelled, wingless insects with pointed heads, do more damage to roses and other garden plants than they are given credit for. They eat holes in and on the edges of leaves and rose petals and in general give the plants a ragged, unkempt appearance. They are difficult to poison, but powdered arsenate of lead, 1 ounce to a gallon and a half of water, will give some control if sprayed on the plants. Where it is practicable to do so the stems of plants can be banded with tanglefoot or cotton batting to prevent the insects from ascending. As they are sluggish in the early morning they can be shaken at that time from the bushes into pans of kerosene. They are adept at hiding and their presence on plants may not be suspected until they are shaken or jarred off.

Cucumber beetles, about the size of ladybird beetles and often mistaken for them, are green in color and black spotted. They eat irregular holes in the foliage of rose bushes and in the flower petals. The arsenic poison recommended for rose beetles will

serve for these insects also. The larvae of both rose beetles and cucumber beetles live in the soil and feed on plant roots. No control can be recommended other than to get rid of the adults and so prevent egg-laying and the consequent hatching of larvae.

Red spiders, minute arachnids, no larger than the head of a pin, sometimes nearly colorless and again having a reddish appearance, may occasionally be found running around on the undersides of the leaves. They suck out their juices and when numerous may cause the leaves to drop. Sulphur alone or lime-sulphur solution as a spray applied to the undersides of the leaves, will control these pests.

Snails and slugs are well known to everyone and need no description. The poison bran formula, described elsewhere in this issue, will be effective if used as directed. For slugs, the addition of a little molasses to the bran mash will make it more effective.

Rose scale is often found on the canes of roses and blackberries. When abundant these scales may completely cover the canes, making them appear almost as if whitewashed or spotted with whitewash. Due to the fact that bush roses are heavily pruned and the canes are frequently renewed, rose scales on such bushes are usually kept down below the point of injury, but on the permanent canes of climbing roses they may do serious harm. When first hatched this scale is a minute, soft-bodied, free-moving insect, but later on it fastens to the cane or twig and inserting its beak begins to pump out the plant juices, in the meantime secreting a protecting covering or scale over its back. For control, clean off the flake-like scales from the canes with a stiff brush and spray with strong lime-sulphur solution. This is best done at the time of the winter cleanup, as recommended following pruning, for the reason that only when the plant is dormant can the strong solutions of lime-sulphur be used without injury to the plant.

The last animal pest to be mentioned is likewise the worst. This is the root-knot nematode or eel-worm, which lives in rose roots. Eel-worms are microscopic in size and except in the case of mature females cannot be seen without the aid of a microscope. Their work is, however, very characteristic and serves to easily identify them. They attack the small feeding roots of practically all garden plants, working their way from the soil into the roots and feeding there. Their presence in the roots causes the formation of small knots or tubercles, hence their common name, root-knot nematodes. The roots of some vegetable plants, such as tomatoes and cucumbers are often enlarged and

(Continued on Page 13)

LATH HOUSE MATTERS

By Alfred D. Robinson.

There is always lath house work, whatever the season, but even such a delightful occupation calls for occasional letups, and this month of December provides an excuse that is not too obviously manufactured. A real maturing has set in with the sample rain that was all we got out of the storms that flooded some places, and a let alone policy is a good one. We can now sit down and plan ahead for the next season. To my own knowledge rare catalogues are being passed around till marginal marks and notes equal the original printing. There is something in human nature that makes it an easy prey of the mail order house. If this something be in the line of natural depravity it would account for the fact that to the youngest child a mail order catalogue is the most fascinating of all literature. Be that as it may, now is the time to consider what seed you will order and later on you can decide how much of it you will plant. From this time for three or four months is the best time for planting Begonia seed, beginning with the Bedding types. The popular fancy hereabout has asked of late years for dwarf type, in which the white Helen Bofinger is still the best, the old favorites, Luminosa, red, and Gracilis, pink, remain standard though a host of new names are in the catalogues. So far as my experience goes they are all safe with us except the winter bloomers, such as Lorraine, Chatelaine, Cincinnati and the newer Melior which require greenhouse treatment. The very dwarf semi-double red, Little Gem, is charming both in pots and for a border and apparently is an all the year round proposition. The seed of all these germinates very easily and the seedling grows right along with the minimum of care, in fact they make the best plants if judiciously neglected, please mark the "judiciously". Seedlings are far preferable to cuttings or divisions.

With the coming of the New Year, tuberous seed should go in even though it will germinate better later on, for an early start means a good tuber the first year and practically a hundred per cent bloom. In more than one place on the Coast this class is being grown from seed in large quantities and good tubers are offered for less than the average person can grow them from seed and I strongly suspect for less than they cost the commercial grower. However, I take it that the lath house devotee does not monkey with seed to save a few cents, but for the joy of doing the thing and in the hope that some-

thing different may turn up. I find the popular interest rather focusing on the Hanging Basket type and the Narcissiflora. The East is now asking for the former but the latter is not well enough known at present to be appreciated. I am inclined to think this Daffodil like variety is the finest thing yet produced in the tuberous, I cut some blooms this November at Thanksgiving and had them in the house with maidenhair fern and they kept for days and were as charming as any orchids, possessing a delicate charm the large singles and doubles miss from sheer size. Don't expect too much of this seed if you try it, only a percentage come true though the off types are fully the equal of any other class.

Rex seed should also be planted early.

Though I am emphasizing early planting it should not be understood that failure must follow the attempt at later seasons, I am harvesting nice tubers from seed planted well along in May and have had small tubers form on seedlings that started in late August.

I do not claim to have a perfect technic for growing Begonias from seed but the pronounced success that attended my efforts this last year as compared with former years has rather tended to shove me into the class of Huckleberry Finn's Jim with his hairball, and I am prepared to put forward as axiomatic, leaf mould, rain water and charcoal. Hitherto I have done my soil sterilizing in a rather casual manner but my creed calls for a thorough treatment, in small quantities a baking in the oven does a good job, is easy and helps the gas company, soaking in boiling water is a half measure as the water only boils before it hits the soil, and worms and other beasties survive, possibly if the pot or box containing all the soil were actually boiled it would cook the goose of all the troubles. Another thing I am sure I have not had drainage enough and I am almost prepared to recommend a fern pot rather than a shallow box to obtain it. I expect to use some sand again with the leaf mould as the Simon pure stuff sets too close before the seedlings are pricked out. Of the various preventives against damping off now on the seedsman's shelves, I endorse Quasul as having given uniformly good results, this is a sulphur preparation and elicited sniffs from two chemists to whom I recommended it. I am trying also a mercury compound called Uspulin but have not gone far enough to render an opinion.

Today I noticed a bloom stalk starting on Verschafelti, Jessie and Templini have blooms opened, and the Rubra types and Coralline Luverne are masses of color. Give your Begonias a chance to do your Christmas decorating.

DISEASE AND INSECT PESTS OF ROSES

(Continued from Page 11)

distorted out of all semblance to normal roots by the attacks of this pest. Affected roots are not able to continue their function and finally slough off and die, releasing enormous numbers of nematodes into the soil. Heavily infested plants become worthless.

No control or cure is known for plants already attacked by nematodes. Any material strong enough to kill the nematodes embedded in the roots would also kill the plants. It is better to pull up badly infested plants, root and all, and burn them. Inasmuch as nematodes live in the soil and will re-infest other plants planted in infested spots, the ground must be sterilized before replanting. This can be done by the liberal use of hot water, 4 to 5 gallons to the square foot. Make a few holes 6 or 8 inches deep with a broom stick and into these pour the boiling water, closing the holes up at once and covering with sacks or old pieces of carpet so that the heat may be retained. If the beds to be treated are first spaded up the hot water will penetrate better. Carbon bisulphide or calcium cyanide injected into the soil will afford a measure of control, but where the area is not too large to make it impracticable, the hot water treatment is the best one known to the writer. A variation of this method is in use in nearly all large greenhouses, steam pipes being run through the soil and live steam injected through them, literally cooking all animal and fungus life in the soil.

If perfect roses are to be had the diseases and pests mentioned in this article must be controlled should they be present. A large part of the damage they may do can be prevented by beginning treatment immediately after discovery. This is particularly true of mildew and aphids.

THE GARDEN

(Continued from page 5)

However, "it is an ill wind that blows nobody good" and, do you know that, as a result of the stooping over when weeding, my waist line was reducing and I was becoming quite agile. But somehow, now that the weeding is over, my figure does not seem to stay "put"!

Moral—When you want to make over an old lawn into a new one, take your time, and make a thorough job of it.

As I have told you before you can make a wonderful improvement in the old lawn by thoroughly raking, cutting off devil grass runners, sowing white clover and fertilizing. To my mind a decent looking lawn is one of the first essentials to an attractive home. But do not try to rush things when re-making an old one.

Remember that we have not yet had a good soaking rain this reason, so if this does not happen before you read this article, a good irrigation of the whole garden will not be amiss. The same advice applies to trees and shrubs.

Towards the end of the month, pruning of deciduous fruit trees will be in order, also spraying of same with Lime and Sulphur Solution, in the proportion of one part of L. & S. S. to twelve parts of water for all dormant stock, to prevent leaf curl and other ills.

Many plants of perennials and annuals can now be set out in the flower garden for spring and summer blooming, and Auratum, Rubrum and Tigrinum Lily bulbs will arrive any day now. Tulips and Narcissi can still go in, and finish up your plantings of German Iris, many of which are now offered at a bargain. The best season for planting Gladioli is fast approaching, and there will be a large number of newer varieties of this popular and beautiful bulbous flower available for planting.

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A READY MADE GARDEN

One of the most entertaining gardens I ever explored was a "ready-made" one. The lure of the lot to the buyer was the wild growth that covered the land. When the contractor and carpenter saw it, they said: "This must all be cut off and graded." "Not a twig more than is necessary for building the house;" said the owner. Stakes were set and wires strung, and "Thus far and no farther," commanded. The home was ready in December and had Christmas decoration from its own garden. Almost half the front yard is shaded by a hollyberry tree whose curving branches screen the front bedroom windows from the street. Twenty years ago fire had swept this ground. Its work was not as devastating as man's pick and shovel, it left the roots in the soil. A section from a charred stump of this tree told that its root was forty years old. East of the house a large elder bush droops its graceful wands full of white bouquets in spring time. By the garage is a lemonade-berry sumach large enough for the children to climb, and a shelter for their playhouse. The rear of the lot is the north slope of a small hill covered thickly with an "Elfin Forest" of much variety. The hostess told me in the spring it furnished blossoms enough to decorate the house for an entertainment. In April there were more than twenty varieties of wild flowers in bloom. I counted twelve varieties in September. Then, the upper half of the hill was brown and dry, yet the California fuschia hung its scarlet fairy lanterns on every bush.

Here was where in the morning the neighbors' terrier played hare and hounds with Peter Rabbit. Peter evidently enjoyed the game. He would sit on a hummock and wiggle his nose at Jip when the dog went hysterically milling around after the lost trail. At noon a covey of quail came daintily mincing across the road. They carefully tasted the new blue grass. Then, finding familiar sight and smell on the undisturbed ground under the holly tree, they peacefully settled to preen and primp, and gossip there an hour with their sweet little twinkling voices. That night, just as the full moon spread her glamor over the hills, a mocker in the elder bush burst into an ecstatic carol. Off in the park a coyote loudly wailed his age old miserere to the moon. Instantly a big collie roared his defiance. "You can't catch me-e-e," Sir Kiote boasted and repeated, "Not me-e-e," while his distance-dimming voice proved discretion was his valor's best part.

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GROWING DAHLIAS FROM SEED

By Edward S. White.

The present day dahlia of our gardens, is as different from the dahlias of the gardens of our grandparents as were their dahlias from the first of the family grown in the gardens of Europe from the seeds sent from Mexico in the eighteenth century. True to its name *Dahlia Varibilis*, the dahl'a will not reproduce itself from seed, hence the charm and pleasure of growing the dahlia in this manner; all of the new named varieties, and the various classes of "Show Cactus, Peony, Decorative, Collerette, Century," were the result of selection from seed.

In California, the long season of bloom, and of growth is ideal for the growing of seedling dahlias, here one can sow the seed in flats or a seed bed early in the year and be assured that before summer his plants will be in bloom.

The method is to sow the seed in flats or the seed bed, not too deep, cover with a wire or cheese cloth, to keep the birds or mice from enjoying too much of a feast, and when the small plants are from four to six inches tall, plant them in well prepared garden soil. If a place where they are shaded part of the day can be found, so much the better. Keep the ground well mulched and watered and the results will astonish you.

Seed from the better varieties will give the larger proportion of double flowers, and some splendid blooms, and in California new types or varieties can be proven as to their value in less time than in the east.

If a seedling shows good color, form or natural growing habits that might make it of value from a commercial point of view, it can be dried off, and replanted the same year, and if the worth is then proven, after the tests required by the Dahlia Society are passed the new dahlia can take its place with the named varieties.

Seedlings given good care in their first season of growth will usually improve during the second trial, but in different soil and under different climatic conditions all dahlias may vary both as to color and growth.

In my own garden dahlias that did splendidly in the east, had a hard time and in some cases were utter failures.

This past year the writer had some 1500 seedlings; from these less than 50 were single and 45 were considered by the grower as worthy of a second trial.

The possibilities of the dahlia in San Diego are great and we can and will produce as fine dahlias as are grown in the bay region of San Francisco.

COMMUNITY SUICIDE

"Committed community suicide by deforestation," is the verdict passed upon the Indian population which lived a thousand years ago at Pueblo Bonito, northwestern New Mexico, by Neil M. Judd, archaeologist of the Smithsonian institution. He has completed the sixth season of work at the ancient pueblo ruin for the National Geographic Society.

Although a barren stretch today, Pueblo Bonita, Judd says, was once well-wooded. The Bonitians, armed with stone axes, cut pine logs from the one-time fertile fields to roof the 800 rooms of their pueblo city, but evidently wasted their forests.

The soil thus bared to the elements and with no trees to store the moisture, gullies formed, Judd reports. Within a relatively few years, the fields which had been cultivated for many previous generations were abandoned as they could not produce sufficient food for the populace which gradually migrated to more fertile districts.

However, a few were loath to leave the home of their forefathers, and the archeologist declares that each succeeding period of construction shows that the new means of defensive devices were adopted by those remaining, some indicating that marauders also helped drive the Bonitians from their community home. — Press item in S. D. Union.

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Rancho Santa Fe California

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REGULAR MEETING

The regular meeting of the San Diego Floral Association was held on Tuesday November 16th, in the Floral Building in Balboa Park; and will be remembered by those present as one of unusual privilege, on account of the distinguished speaker of the evening.

The president, Mrs. Greer, called the meeting to order, and after a few remarks, including the announcement that there will be no meeting of the association during December, called on Mr. Merrill, chairman of the program committee, in regard to the show of holiday greens and wreaths, to be held December 14th. Mr. Merrill explained that wreaths and other displays must be made of berried shrubs other than California Holly. Ribbons will be offered for the best display in each class, and after the show, wreaths will be sold. The Floral Building will be open from 12 to 2 for entries and from two to five o'clock for visitors. The committee hopes that great interest may be taken in this show. Premium list will be published in the newspapers.

One of the enjoyable features of the program was three numbers on the harp, played by Miss Kathleen Thompson.

In introducing the speaker of the evening, Dr. L. H. Bailey, the chairman remarked that "when Bailey's Cyclopedias were put on our shelves, we little thought that some day we should have the honor of having the author with us." Dr. Bailey, former Dean of Horticulture of Cornell University, Chairman of Country Life Commission, appointed by President Roosevelt, is now President of the National Scientific Association of Horticulture. He has travelled extensively in the interest of horticulture and has now found his way to sunny California to spend a part of the winter in and around San Diego.

It was an interested audience—one thoroughly in sympathy with his subject—which followed Dr. Bailey through his entertaining and instructive talk on horticultural matters. Throughout his talk—which was interspersed with entertaining reminiscences and

an occasional dash of humor—he stood out as the friend of plant life; and when he spoke of growing flowers for the love of them and not merely for the purpose of furnishing the home with cut flowers, one could feel the depth of his interest in plants and flowers. "Grow them yourself he told us, "and don't wear gloves; get down and dig in the ground instead of having your gardener do it for you; that is what shows real love of plant life."

In speaking of the science of horticulture, he thinks the amateur horticulturist is the one who gets the most joy out of flowers and plants—and that class outnumbers the professional many times over. In connection with the transformation from sage brush and weed to Balboa Park as now seen, he took occasion to say: "As a stranger in this community, may I express the hope that you will always keep your park inviolate. A park devoted to any other use, can never be a park again. Keep it while you have it." May the writer add, parenthetically, that this last scare was just one too many and brought the people of San Diego to a sense of the danger of losing it. We followed Dr. Bailey's advice.

A short talk on rare specimens was given by Miss Kate O. Sessions, after which an informal reception to Dr. Bailey and his daughter was held.

Coffee and cookies were served at the close of the meeting, by the house committee.

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